Analysis of District Wise Tourist Arrivals in Tamil Nadu, India

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Abstract

The present study has been conducted to analyze district wise domestic and foreign tourist arrivals and the variations of tourist based on the elevation of the districts. study is based on the secondary data, number of tourist arrivals has been collected from the State Department of Tourism and the elevation data has been prepared based on the Shuttle Radar Topography Mission images. The result of spatial variation shows that, very few districts in the state receives large number of tourists while large number of districts receive very less number of tourists. Especially the district Chennai has received high number of domestic and foreign tourist arrivals followed by Kancheepuram in foreign tourists and Dindigul in domestic tourists. The correlation of elevation with the tourist represents that, domestic tourists are highly desire to visit the mountainous areas than foreign tourists.

Key Words:

Tourism; Spatial Analysis; Correlation; Elevation; Classification

INTRODUCTION

Tourism is one of the major industries which generate the direct and indirect employment of a region with the socio-economic growth. The policy report for the year 2013-2014

published by the Tamil Nadu tourism department indicates that, every year around 31

to 34 per cent of tourists have been increasing compared to the previous year, this directs the healthy trend in the tourism sector. Tamil Nadu is one of the states in India which has integrated geographical units, historical monuments, famous pilgrim centers, dense forests that attracts all varieties of tourists. The state Tamil Nadu stands in second place next to Maharashtra in foreign tourist arrivals while third in domestic tourist arrivals after to Andhra Pradeshand Uttar Pradesh (Author).

The tourist arrivals in Tamil Nadu vary from place to place depends up on the variations in attraction from one destination to another. At the same time the percentage of domestic tourist arrivals to a particular destination varies from foreign tourist arrivals because of the changes of their desire on the destination. As well as elevation of a region is one of the major factors to pull the tourists into the destination, where a tourists can enjoy the pleasant climate, clean air, varied topography, beautiful scenery and tracking. Therefore the study of spatial variation in tourist arrivals, difference between foreign and domestic tourist arrivals to a particular destination and the tourist variation of flow based on the elevation would bring out the valuable results for the developmentalactivities of state's tourism. Thus the present study has been concentrated to analyze the district wise spatial variation of tourist arrivals and the relationship between the elevations with the tourists.

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STUDY AREA

The state Tamil Nadu located on the southern part of India, which shares its border with Andhra Pradesh in North, Bay of Bengal in East, Indian Ocean and Arabian Sea in the south, Kerala in the West and Karnataka in the North West. The geographical extension of the state is from $8^{0}20$, 4.05, latitude to 13^{0} 33 13.50" and from 76^0 15' 25.05" longitude to 80^0 20' 4.05". The state has been divided into 32 districts for the administrative purpose (map 1) and its total population is 72,147,030 according to census of India 2011. The state has complex geographical units, which has coastline of over 1000 Km in the eastern site while uplands and hills in west, central and southern parts are arid plain whereas northern parts are mixed of hills and plains. According to the state tourism department, Tami Nadu is a multi-dimensional tourist product. Temple towns, historical monuments, wildlife and bird sanctuaries, hill resorts, waterfalls, beaches, breathtaking valley views, backwaters, mangrove forests, numerous places of worship, historical forts, rich heritage and culture, music and dance festivals comprise the tourism wealth of Tamil Nadu.

METHODOLOGY

The necessary data for the study have been collected from the tourism department of the state from 2010 to 2013. The availability of tourist data prior to 2010 was available only for 19 districts of the state; therefore, the district wise analysis of tourist was made between 2010 and 2013. The data have been analyzed and mean value of each year have been mapped at district level to find out the spatial variations of domestic and foreign tourist arrivals. The Shuttle Radar Topography Mission (SRTM)

data have been used to prepare the digital elevation model of Tamil Nadu, the mean elevation data each districts has been generated. Finally mean elevation value of each district has been correlated with the mean number of tourist arrivals to find out the topographical influence on the tourist arrivals.

RESULTS AND DISCUSSION

To find out the spatial variations of domestic and foreign tourist arrivals between 32 districts of Tamil Nadu, the mean value of each district tourist arrivals have been calculated and it have been mapped using Geographical Information System (Map 2). The map shows that, the desire of foreign and domestic tourist arrivals in the state differs between the districts. The detailed report on the result is discussed below.

SPATIAL VARIATION OF TOURISTS

To generalize the mean value of districts in to five groups as very low, low, moderate, high and very high, the number of tourist arrivals has been combined using equal interval method classification (table 1).

The classification of district wise domestic tourist arrivals shows that, totally 2 districts are having very high arrivals, such as Chennai and Dindigul, 5 districts are having high arrivals, 6 districts are having moderate arrivals, 4 districts are having low arrivals and 15 districts are having very low arrivals. The classification of district wise foreign tourist arrival shows that, 2 districts are having very high arrivals, such as Chennai and Kancheepuram, no districts are having high arrivals, 1 district is having moderate arrivals, 5 districts have low arrivals and 24 districts are having very low arrivals (map



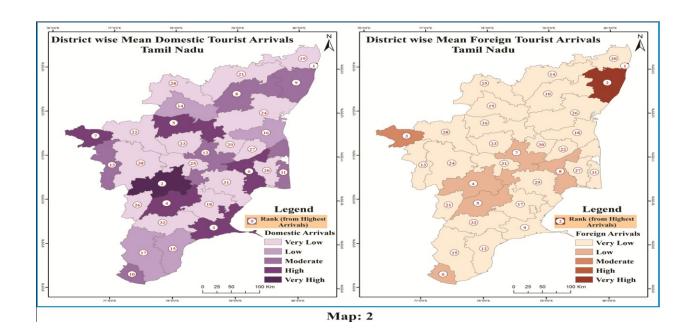
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| Table 1: Classification of Tourist Arrivals in Tamil Nadu | | | | | | | | |
|---|--------------------------------|--------------------------|---------------------------------|----------------------|--------------------------|--|--|--|
| Domestic Tourists Classification | | | Foreign Tourists Classification | | | | | |
| Classes | Class Values | Number of District | Classes | Class Values | Number of District | | | |
| Very Low | < 3356881.85 | 15 | Very Low | < 154301.1 | 24 | | | |
| Low | 3356881.85 to 6572281.45 | 4 | Low | 154301.1 to 308572.2 | 5 | | | |
| Moderate | 6572281.45 to 9787681.05 | 6 | Moderate | 308572.2 to 462843.3 | 1 | | | |
| High | 9787681.05 to 13003080.65 | 5 | High | 462843.3 to 617114.4 | 0 | | | |
| Very High | > 13003080.65 | 2 | Very High | > 617114.4 | 2 | | | |
| The class va | lueshave been classified based | on the equal int | terval method c | lassification | • | | | |

The district Chennai, which is the capital of state receives very high number of domestic as well as foreign tourist arrivals, while the Dindigul is second in domestic and Kancheepuram is second it foreign arrivals. The map 2 which has been created for the assessment of spatial distribution shows that, domestic tourists are highly desire to visit the natural place like, Kotaikanal (Dindigul), Yercaud (Salem) and Ooty (The Nilgiri) followed by the pilgrimage centers like Madurai, Thanjavur, Ramanathapuram and Kancheepuram. The coastal tourism among the domestic tourist arrivals is lesser than

nature and pilgrimage destination. The distribution of foreign tourist arrival shows that, Chennai andKancheepuram are having very high arrivals followed by The Nilgiri. Especially the Kancheepuram attracts the foreign tourist arrivals more than any districts Tamil Nadu. the heritage in Mamallapuram, which is located in the Kancheepuram district attracts the tourists' lot. It is clear from the spatial distribution map that, foreign tourist arrivals concentrated at Kancheepuram and Chennai followed by The Nilgiri, central part of Tamil Nadu and KanniyaKumari.



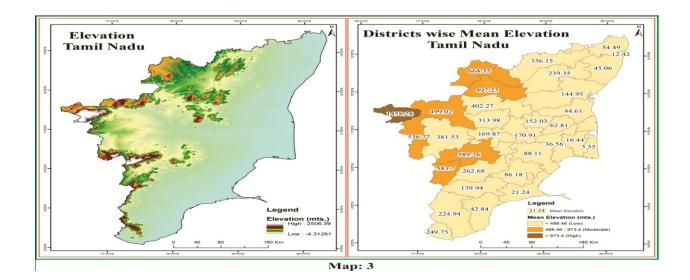
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CORRELATION

The entire state elevation map has been prepared based on the SRTM data with 1,000 m²spatial resolution and from this each district mean elevation value has been calculated. Then the mean elevation value of each district has been correlated with the mean tourist arrivals of domestic and foreign tourist arrivals. The prepared elevation map shows that, the state's highest elevation is 2506.39 meters while least is -4.31 meters.

The districts mean values have been classified into three groups for the mapping purpose such as, low (< 488.46 mts.), moderate (488.46 to 973.4 mts.) and high (> 973.4 mts.). The district wise mean elevation map shows that, the district Nilgiri has highest elevation than other district in the state and followed by Krishnagiri, Dindigul, Theni, Coimbatore, Erode and Dharmapuri, while rest of the districts are having low elevation.



| | | Table 2: | Result of C | orrelation A | nalysis |
|-------------------|------------------------|------------------|-------------------|-------------------|------------------|
| Correla | tion Between Do | Correlation Betv | | | |
| | | Mean Domestic | Mean Elevation | | |
| Mean Domestic | Pearson Correlation | 1 | .077 | Mean Foreign | Pearso Correl |
| | Sig. (2-tailed) | | .676 | | Sig. (2- |
| | N | 32 | 32 | | N |
| Mean Elevation | Pearson Correlation | .077 | 1 | Mean Elevation | Pearso Correl |
| | Sig. (2-tailed) | .676 | | | Sig. (2- |
| | N | 32 | 32 | | N |

| Correlation Between Foreign and Elevation | | | | | | |
|---|------------------------|-----------------|-------------------|--|--|--|
| | | Mean Foreign | Mean Elevation | | | |
| Mean Foreign | Pearson Correlation | 1 | .021 | | | |
| | Sig. (2-tailed) | | .910 | | | |
| | N | 32 | 32 | | | |
| Mean Elevation | Pearson Correlation | .021 | 1 | | | |
| | Sig. (2-tailed) | .910 | | | | |
| | N | 32 | 32 | | | |

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The result depicts that, correlation between mean domestic tourist arrivals with mean elevation is 0.077 while foreign tourist arrivals is 0.021 (Table 2). This clearly represents that, domestic tourists are highly desire than foreign tourist arrivals to visit the elevated places in the state, such as The Nilgiri and Kotaikanal and Yercaud.

CONCLUSION

The study conducted to analyze the spatial variations of district wise tourist arrivals depicts that the district Chennai receives large number of domestic and foreign tourists than any other districts in Tami Nadu, which is based on the mean value between 2010 and 2013. The district Kancheepuram receives higher number of foreign tourist and Dindigul receives higher number of domestic tourist followed by Chennai. The spatial distribution showed that, domestic tourists are highly desired to visit the hilly places and pilgrim sites than other places. The foreign tourist distribution depicts that, their concentration is only at Kancheepuram and Chennai, followed by Udhagamandalam and Dindigul.

The districts Dharmapuri, Thoothukudi, Cuddalore, Tirunelveli, Sivagangai, Tiruvallur, Tiruvarur, Vellore, Erode. Namakkal, Villupuram, Karur, Theni, Arivalur, Krishnagiri, Tiruppur, Perambalur. Pudukkottai and Virudhunagar are having less number of tourist arrivals, so the suitable places in these districts can be found and it can be developed to increase the number of tourist in these districts. The correlation between tourist arrivals with the elevation shows the positive correlation for domestic and foreign tourist arrivals, but the value for the domestic tourists is higher than foreign, which clearly states that, domestic tourist are highly desire to visit the mountainous areas than foreigners in Tamil Nadu. Therefore it is necessary development steps on the mountainous areas to attract the foreign tourists like Yercaud, Ooty and Kodaikanal.

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